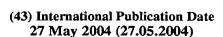
535,164

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau







PCT

	(10) International Publication N	iumber
1	WO 2004/044123	A2

(51) International Patent Classification7:

C12N

28 August 2003 (28.08.2003)

(21) International Application Number:

10/651,227 10/604,985

10/649,653

29 August 2003 (29.08.2003) 29 August 2003 (29.08.2003) US

US

US

PCT/IL2003/000970

(71) Applicant (for all designated States except US): ROSETTA GENOMICS LTD. [IL/IL]: 10 Plant Street. Science Park, 76706 Rehovot (IL).

(22) International Filing Date:

16 November 2003 (16.11.2003)

English

(25) Filing Language:

(26) Publication Language:

English

(30) Priority Data: 10/293.338

10/310,914

10/321,503

10/345,201

60/468,251

10/604,726

10/604.727

10/604,926

14 November 2002 (14.11.2002)	US
6 December 2002 (06.12.2002)	US
18 December 2002 (18.12.2002)	US
16 January 2003 (16.01.2003)	US
7 May 2003 (07.05.2003)	US

13 August 2003 (13.08.2003) US

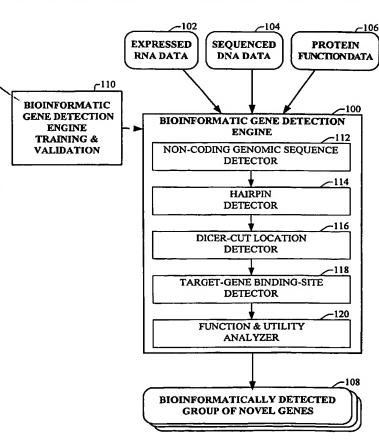
13 August 2003 (13.08.2003) US 27 August 2003 (27.08.2003) US (72) Inventor; and

(75) Inventor/Applicant (for US only): BENTWICH, Itzhak [IL/IL]; Rosetta Genomics Ltd., 10 Plaut Street, Science Park, 76706 Rehovot (IL).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: BIOINFORMATICALLY DETECTABLE GROUP OF NOVEL REGULATORY GENES AND USES THEREOF



(57) Abstract: The present invention relates to a first group of novel genes, here identified as genomic address messenger or GAM genes, and a second group of novel operon-like genes, here identified as genomic record or GR genes. GAM genes selectively inhibit translation of known 'target' genes, many of which are known to be involved in various diseases. Nucleic acid molecules are provided respectively encoding 8607 GAM genes, and 1096 GR genes, as are vectors and probes both comprising the nucleic acid molecules, and methods and systems for detecting GAM and GR genes and specific functions and utilities thereof, for detecting expression of GAM and GR genes, and for selectively enhancing and selectively inhibiting translation of the respective target genes thereof.

WO 2004/044123 A2



(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

 without international search report and to be republished upon receipt of that report with sequence listing part of description published separately in electronic form and available upon request from the International Bureau

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.